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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/716,467 | 11/20/2003 | Hans-Peter Mayer | Q78456 | 6852 |
| 23373 | 7590 | 09/15/2005 | EXAMINER | |
| SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037 | | | HEALY, BRIAN | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2883 | |

DATE MAILED: 09/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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| APPLICATION NO./ CONTROL NO. | FILING DATE | FIRST NAMED INVENTOR / PATENT IN REEXAMINATION | ATTORNEY DOCKET NO. |
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| EXAMINER |
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| ART UNIT | PAPER |
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09142005

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

The previous office action mailed 7/21/2005 was missing action on the merits for claims 11-16. The attorney of record, Mr. Kakarla, had phoned the examiner and left a phone message pointing out the error in the office action within a month of the mailing date. Because this was the mistake of the examiner and in accordance with MPEP 710.06 the time for response to the previous office action is hereby restarted to a period of THREE (3) months from the mailing date of this office action. Please note that the previous office action that re-set the time for response to 2 months was in error. Any questions concerning this office action should be directed to:

Brian M. Healy
Primary Examiner
Art Unit: 2883
Phone:(571)272-2347

Primary Examiner

Brian M. Healy
Primary Examiner
Art Unit: 2883

Office Action Summary

Application No.

10/716,467

Applicant(s)

MAYER, HANS-PETER

Examiner

Brian M. Healy

Art Unit

2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on issue withdrawal letter.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17 and 18 is/are allowed.
- 6) ☒ Claim(s) 1-7, 9, 11, 12 and 14-16 is/are rejected.
- 7) ☒ Claim(s) 8, 10 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SF/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: PTOL-90.

DETAILED ACTION

The time for response has been RE-STARTED to THREE(3) months from the mailing date of this office action. (SEE ATTACHED PTOL-90). PLEASE NOTE THAT THE PREVIOUS OFFICE ACTION TIME PERIOD OF 2 MONTHS WAS IN ERROR.

Allowable Subject Matter

Applicant is advised that the Notice of Allowance mailed 3/11/2005 (See also 'Notice of Withdrawal from Issue Under 37 CFR 1.313" signed by Director, Janice Falcone) is vacated. If the issue fee has already been paid, applicant may request a refund or request that the fee be credited to a deposit account. However, applicant may wait until the application is either found allowable or held abandoned. If allowed, upon receipt of a new Notice of Allowance, applicant may request that the previously submitted issue fee be applied. If abandoned, applicant may request refund or credit to a specified Deposit Account. The Examiner regrets any inconvenience to Applicant caused by this action.

The indicated allowability of claims 1-16 is withdrawn in view of the newly discovered reference(s) to (see applied references listed below) . Rejections based on the newly cited reference(s) follow.

Claims 17 and 18 are allowed over the prior art for the reasons discussed in the previous office action.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 1 recites the broad recitation "at least one piece of waveguide structure", and the claim also recites "in particular, a piece of fiber" which is the narrower statement of the range/limitation. Claims 2-5 are dependent claims that are also rejected as being inclusive of rejected claim 1.

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Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention as is described above.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1,6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamamoto et. al., U.S.P. No. 4,233,506.

Yamamoto et. al. 506' teaches (Figs.1-18) a planar lightwave circuit and method of making same comprising : an optical device 8 including an angled piece of a fiber bundle or fiber array that has at least one thin film layer 19 deposited on at least one end facet and held by planar lightwave substrate 24. The method of making the device involved cutting or sawing a fiber bundle or array at an angle and then depositing the thin film layer. The teachings of Yamamoto et. al. 506' clearly, fully meets Applicant's claimed limitations.

Claims 1,2, 5 , 11,12,,14,15 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim et. al., U.S.P. No. U.S. 2002/0197008A1.

Kim et. al. 008' teaches (Figs.1-2) a planar waveguide circuit 200 multiplexer/duplexer comprising : an optical device comprising a piece of waveguide 200a (Note that although this is an integral structure the waveguide 200a is also considered a sub-component or piece of the whole device) of waveguide structure with at least one thin-film filter 201 (Note the thin film layer is used for multiplexing/de-multiplexing wavelength reflection/transmission) placed at the end facet of the waveguide structure and with the filtered signal routed to optical fibers 203 including a core and cladding which clearly, fully meets Applicant's claimed limitations.

Claims 1,3,4,6,7, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee et. al., U.S.P. No. 6,909,830.

Lee et. al. 830' teaches (Figs.1-12) a planar waveguide device 1110 and method of making same comprising : at least one piece of waveguide structure 2000 (this can be a fiber bundle or array) that is placed inside of a recess 3060 in the planar lightwave circuit with the faceted end being angularly cut (with respect to the fiber axis) or sawed, polished and coated with a thin film layer 2050 and used in conjunction with an index matching material, which clearly, fully meets Applicant's claimed limitations.

Allowable Subject Matter

Claims 8,10 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. None of the references of record teaches or suggests joining fibers into fiber bundles and fiber arrays using matrix materials, as is described in claim 8 , having the fiber pieces separated from a fiber plate after thin film deposition, as is stated in claim 10 or using a saturatable absorber filter with the limitations of claim 1 (claim 13).

The following references are also cited by the Examiner as being pertinent prior art: Jackson et. al., U.S.P. No.5,321,251 (Figs.1-8B) and Walker et. al., U.S. Patent Application Publication No. US 2002/0168157 A1 (Figs.1-28).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian M. Healy whose telephone number is (571)272-

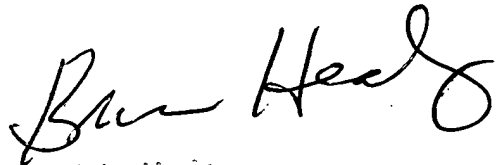
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2347. The examiner can normally be reached on Compressed schedule Tues.-Thurs.
7AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on (571)272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian M. Healy
Primary Examiner
Art Unit 2883



Brian M. Healy
Primary Examiner